

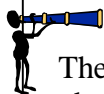
## Chapter 17

### Safety Inspection Checklists



#### **Purpose:**

This chapter is included to provide a ready reference for inspection of facilities and construction sites by facility managers, facility representatives and other DOE-RL employees.



#### **Scope:**

The intention of this chapter is not to provide a complete list of items to be checked. Details of each requirement are contained in 29 CFR 1910, Occupational Safety and Health Standards for General Industry and 29 CFR 1926, "Safety and Health Standards for Construction." Included in this chapter are the following:

- ❖ Walk-Through Checklist Guide For General Industry
- ❖ Responsibilities
- ❖ Before Walking
- ❖ Helpful Hints for Assessment
- ❖ Assessment Subjects
- ❖ Voluntary Protection Program (VPP)
- ❖ Your Personal Guidebook
- ❖ Safety Requirements On Construction Sites
- ❖ OSHA/DOE Safety and Health Checklist For Facility Representatives.
- ❖ References
- ❖ Related Chapters



#### **Walk-Through Checklist Guide For General Industry:**

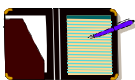
Since safe conditions depend on vigilance for possible hazards and immediate remedial action when necessary, periodic inspections are one of the most important aspects of a successful safety and health program. Management at Hanford will find checklists, such as the ones presented on the following pages, helpful in performing a self-inspection of its facility.

Because work conditions vary with each site, each facility should develop a customized list using the information found in this booklet and gained through a walk-through inspection.



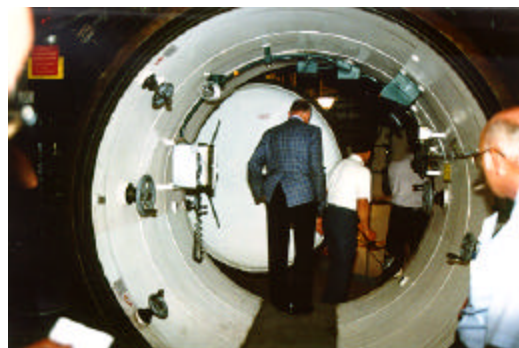
#### **Responsibilities:**

Using this checklist, the manager, supervisor, or employee representative should make periodic inspections (preferably at least once each month) to identify problem areas so that corrective action may be taken.



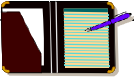
### Before Walking:

1. The blank or lined area in this checklist is provided for;
  - a) Additional Standards
  - b) Notes
  - c) Personals
  - d) Contacts
2. This checklist is not a full training aid, but only a starting guide. DOE-RL Quality, Safety and Health Division and Performance Assessment Division under Environment, Safety and Health (ESH) have trained and competent staff to provide services to you and mentor you in the areas of ESH. Should you desire and want to learn more on conducting self-inspections or other detail requirements; (e.g., chemicals).
3. Contact ESH at 376-7387, 376-7461, 376-0680.



### Helpful Hints For Doing An Assessment:

1. Prior to entry into a facility, room or area of operation; STOP, LOOK, LISTEN, SMELL and get a general feel.
2. Comply with ALL requirements prior to entry.
3. Think and be knowledgeable of the type of work - hazards that might be encountered.
4. You are your own best Health and Safety person. Use common sense.
5. Wear appropriate personal protective equipment. These might include:
  - a) Safety glasses (prescription/nonprescription)
  - b) Safety glasses side shields
  - c) Head gear (hard hat) and/or (warm hat)
  - d) Mask glasses
  - e) Safety shoes
  - f) Radiation dosimeter (film badge or TLD badge)
  - g) Gloves for cold weather
  - h) Warm Jacket
  - i) \_\_\_\_\_
  - j) \_\_\_\_\_
  - k) \_\_\_\_\_



**Assessment Subjects:**

1. Walking And Working Surfaces, Aisles, And Floors  
(29 CFR 1910.22)

- ☐ Are all places of employment kept clean and orderly?
- ☐ Are floors, aisles, and passageways kept clean and dry; are all spills cleaned up immediately?
- ☐ Are floor holes, such as drains, covered?
- ☐ Are permanent aisles appropriately marked?
- ☐ Are wet surface areas covered with nonslip materials?

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2. Storage Lofts, Second Floors, Etc. (29 CFR 1910.22, .23)

- ☐ Are signs present showing floor load capacity?
- ☐ Are platforms, storage lofts, balconies, etc., that are more than 4 feet above the floor, protected with standard guardrails?
- ☐ Are all platforms, lofts, and balconies (where people or machinery could be exposed to falling objects) guarded with standard 4 inch toeboards?
- ☐ Are bridges provided over conveying devices?

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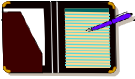
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3. Stairs (29 CFR 1910.24)

- ☐ Are standard stair rails or handrails on all stairways having four or more risers?
- ☐ Are all stairways at least 22 inches wide?



- ☐ Do stairs have at least a 7 foot overhead clearance?
- ☐ Do stairs angle no more than 50 and no less than 30 degrees?

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4. Ladders (29 CFR 1910.25, .26, .27)

- ☐ Have defective ladders (those with broken rungs, side rails, etc.) been tagged as "DANGEROUS, DO NOT USE" and removed from service for repair or destruction?
- ☐ Is it prohibited to use the top of an ordinary portable ladder as a step?
- ☐ Do fixed ladders have at least 3 1/2 feet of extension at the top of the landing?
- ☐ Is the distance between the centerline of rungs on a fixed ladder and the nearest permanent object in back of the ladder at least seven inches or more?
- ☐ Do all fixed ladders have a preferred pitch of 75 degrees to 90 degrees?
- ☐ Do fixed ladders longer than 20 feet have cages or other full protection features?
- ☐ Do fixed ladders longer than 30 feet have landing platforms or other full protection devices?

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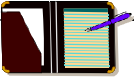
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5. Egress (29 CFR 1910.36-.38)

- ☐ Are all required exits clearly marked with an exit sign and illuminated by a reliable light source?
- ☐ Is the lettering at least six inches high with the principal letter strokes at least 3/4 of an inch wide?



- ☐ Is the direction to required exits, when not immediately apparent, marked with visible signs?
- ☐ Are doors or other passageways that are neither exits nor access to an exit, and located where they may be mistaken for exits, appropriately marked "NOT AN EXIT," "TO BASEMENT," etc.?
- ☐ Are exit doors side-hinged?
- ☐ Are all doors that either must be passed through to reach an exit or are the ways to an exit, always free for access, with no possibility of a person being locked inside?
- ☐ Are all exit routes always kept free of obstructions?

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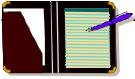
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6. Occupational Health And Environmental Control (29 CFR 1910.94)

- ☐ Is management aware of the hazards caused by various chemicals being stored?
- ☐ Is employee exposure to these chemicals kept within the acceptable levels?
- ☐ Are all containers, such as vats and storage tanks, labeled so employees know their contents?
- ☐ Are employees required to wear personal protective equipment (gloves, eye protection, respirators, etc.) when handling hazardous materials?
- ☐ Is vacuuming, rather than blowing or sweeping, used whenever possible for clean-up?
- ☐ Are grinders, saws, and other machines that produce respirable dusts vented to an industrial collector or central system?
- ☐ Is adequate ventilation provided to minimize exposure to wood dust?



- ☐ Are all local exhaust ventilation systems designed and operating properly?
  - ☐ Ducts not plugged
  - ☐ Belts not slipping
  - ☐ Proper air flow and volume

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7. Radiation, Ionizing/Non-Ionizing (29 CFR 1910.96-.97)

- ☐ Has management implemented proper controls to minimize any employee from being exposed to radiation, electromagnetic, laser, microwave, RF, etc., in excess of applicable limits?
- ☐ Are areas of radiation (ionizing or non-ionizing) conspicuously posted with appropriate signs, lights and/or barriers?
- ☐ Is management maintaining records of the radiation exposures for when personnel are monitored are required or requested?
- ☐ Are radiation work procedures posted and provisions followed by radiation workers?

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8. Hazard Communications (29 CFR 1910.1200)

- ☐ Program elements that are required are:
  - ☐ Containers properly labeled?
  - ☐ Materials Safety Data Sheets (MSDS) current and available at the work site.
  - ☐ All employees trained and informed of the hazards?
  - ☐ Safe work procedures established, available, and workers know how to protect themselves?

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9. Hazardous Waste/Emergency Response (29 CFR 1910.120)

- ☐ Has a safety and health officer been established and has the safety and health program/plan been written and implemented?



- ☐ Is site hazardous waste evaluated and characterized?
- ☐ Have all employees or workers having access received 40 hours training and/or annual refresher (8 hour) training?
- ☐ Have assigned personnel received a medical surveillance?
- ☐ Are engineering controls, work practices, and protective equipment provided, implemented and/or combinations to reduce health exposures?
- ☐ Are other considerations made, i.e., hazardous communication, sanitation, illumination, information, decontamination, excavation and emergency response programs?

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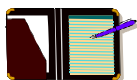
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**10. Hazardous Waste Operations And Emergency Response**  
 (29 CFR 1910.120)

- ☐ Is the waste operation under Resource Conservation and Recovery Act of 1976 (RCRA) or a treatment, storage, and disposal (TSD) facilities regulated under 40 CFR parts 264-265?
- ☐ Is there a written Health and Safety (H&S) Program? Is it written? Have all read and knowledgeable of the contents?
- ☐ Is there a site-specific safety and health plan (HASP)? Are all knowledgeable and trained to the plan.
- ☐ Is there a person in charge and H&S officer on site?
- ☐ Are ALL workers, visitors, and regulators fully trained?
  - ☐ 24 hour with 1 day site specific?
  - ☐ 40 hour with 3 day site specific?
  - ☐ 8 hour annual refresher/required site specific?
- ☐ Do ALL have current entry requirement cards?



Note:

If ANY of the following exist, then the operation in the facility is classified to require 40 hour training with 3 day site specific and/or 8 hour refresher as required:

- a) Hazardous material is not fully characterized, or
- b) Levels of hazardous materials could exceed the threshold limit values (TLV) or Permissible Exposure Levels (PEL), or
- c) Respiratory equipment is required.

☐ See HASP for additional requirements!

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#### 11. Asbestos Activities (Removal, Demolition, Encapsulation, Alternation) (29 CFR 1926.58)

Note: All asbestos work at Hanford is in the process of disposal. No new asbestos is to be installed without permission of DOE.

- ☐ Has initial monitoring been conducted and workers informed?
- ☐ Are all workers fully trained and certified?
- ☐ Are pre-work briefings held and workers involved in the work process?
- ☐ Requirements vary depending on time weighted average (TWA)
  - ☐ Are levels of asbestos above the permissible level of 0.1 fiber/cc for a TWA?
  - ☐ Are levels of asbestos above the suggested action level of 0.05 fiber/cc for a TWA?
  - ☐ Are levels of asbestos below the action level of 0.1 fiber/cc/TWA and below or above the ceiling level of 0.5 fiber/cc for a TWA.
  - ☐ Regardless of level there are specific requirements under;
    - Labels
    - Housekeeping
    - Communication of hazards
    - Worksite/job evaluation for all hazards
    - Recordkeeping

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**12. Air Contaminants (29 CFR 1910.1000)**

- ☐ Is employee exposure to chemicals kept within the acceptable levels?
- ☐ Are eye-wash fountains and safety showers provided in areas where chemicals such as caustics are used?
- ☐ Are all containers, such as vats and storage tanks, labeled so employees know their contents?
- ☐ Is vacuuming used, rather than blowing or sweeping dusts, wherever possible to reduce airborne contaminants?
- ☐ Are affected employees given annual audiometric tests, if necessary?
- ☐ Do all employees in high-noise areas wear hearing protectors?

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**13. Occupational Noise Exposure (29 CFR 1910.95)**

- ☐ If a noise problem is suspected, are noise levels measured?
- ☐ If a noise problem exists, have plans to reduce noise levels by engineering methods been made (e.g., enclosure, maintenance, different methods of processing)?
- ☐ If engineering controls cannot reduce the noise to safe levels:
  - ☐ Have administrative controls, such as limiting worker exposure in a given area, been started?
  - ☐ Are affected employees given annual audiometric tests, if necessary?
  - ☐ Do all employees in high-noise areas wear hearing protectors?
  - ☐ Are annual facility noise surveys made to reevaluate the problem?

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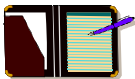
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14. Hazardous Materials Flammable And Combustible Liquids  
(29 CFR 1910.106)

- ☐ Are all connections vapor- and liquid-tight on drums and combustible liquid piping?
- ☐ Are flammable liquids kept in closed containers (parts cleaning tanks, pans, etc.) when not in use?
- ☐ Are all spills of flammable or combustible liquids cleaned up promptly?
- ☐ Is combustible waste material (oily rags, etc.) stored in covered metal receptacles and disposed of daily?
- ☐ Are bulk drums of flammable liquids grounded and bonded to containers during dispensing?
- ☐ Are gasoline and other flammable liquids stored in approved containers?
- ☐ Do storage rooms for flammable and combustible liquids have mechanical or gravity ventilation (at least six air changes per hour)?
- ☐ Are storage cabinets for flammable liquids labeled "FLAMMABLE--KEEP FIRE AWAY"?
- ☐ Is there never more than one day's supply of flammable liquids outside of approved storage cabinets or rooms?
- ☐ Are LP gas storage tanks guarded to prevent damage from vehicles?
- ☐ Are "NO SMOKING" signs posted on LPG gas tanks and other areas where flammable and combustible liquids are present?

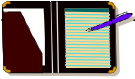
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15. Personal Protective Equipment (29 CFR 1910.132-.137)

- ☐ Is employee-owned personal protective equipment, such as gloves, protective shoes, etc., adequate and properly maintained?
- ☐ Do employees wear required personal protective equipment (gloves, eye protection, respirators, etc.) when handling hazardous materials?
- ☐ Are ear plugs or muffs provided and worn during noisy conditions?
- ☐ Is slip-resistant footwear worn?
- ☐ Are hard hats or safety shoes available where falling objects could be a hazard?

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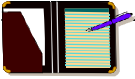
16. Respiratory Protection Devices (29 CFR 1910.139)

- ☐ Are NIOSH approved respirators provided and worn during dusty operations, spraying, etc.?
- ☐ Is the proper respirator in use for the hazards present? (For example, dust masks do not protect against solvent vapors.)
- ☐ Are written standard operating procedures available to the employee for the selection and use of respirators?
- ☐ Is the employee user-trained in the proper use of respirators?
- ☐ Are respirators cleaned and disinfected after each use?
- ☐ Are respirators stored in a convenient, clean, and sanitary location?
- ☐ Are routinely used respirators inspected during cleaning?

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17. General Environmental Controls Sanitation (29 CFR 1910.141-.149)

- ☐ Are restrooms and washrooms kept clean and sanitary?
- ☐ Are covered receptacles for waste food kept in clean and sanitary condition?
- ☐ Is all water provided for drinking, washing, and cooking suitable for drinking?
- ☐ Are all outlets for water not suitable for drinking clearly posted as "UNSAFE FOR DRINKING, WASHING, OR COOKING?"
- ☐ Are employees prohibited from eating in areas where toxic materials are present?
- ☐ Is pest and rodent control exercised where needed?
- ☐ If employees are permitted to eat on the premises, are they provided with a suitable space for that purpose?

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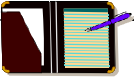
18. Medical And First Aid (29 CFR 1910.151)

- ☐ Is at least one employee on each shift currently qualified to render first aid?
- ☐ Are means provided for quick drenching or flushing of the eyes and body in areas where corrosive materials are used?
- ☐ Is there a first aid kit easily accessible to the work area, with supplies readily available, inspected, and replenished?
- ☐ Have first aid supplies been approved by a consulting physician, indicating that they are adequate?
- ☐ Are medical personnel readily available for advice and consultation on matters of employee health?
- ☐ Are emergency phone numbers posted (911)?

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19. Fire Protection (29 CFR 1910.156-.157)

- ☐ Are extinguishers selected for the types of combustibles and flammables in the areas where they are to be used?  
Class A. Ordinary combustible material fires.  
Class B. Flammable-liquid, or grease fires.  
Class C. Energized-electrical-equipment fires.
- ☐ Are extinguishers fully charged and in designated places?
- ☐ Are extinguishers located along normal paths of travel?
- ☐ Are extinguisher locations free from obstruction or blockage?
- ☐ Are extinguishers mounted at the correct height? If less than 40 pounds, the top must be no higher than 5 feet above floor; if greater than 40 pounds, the top must be no higher than 3 1/2 feet above floor.
- ☐ Have all extinguishers been serviced, maintained, and tagged at intervals not exceeding one year?
- ☐ Are all extinguishers checked (by management or designated employees) monthly to see if they are in place and fully charged?
- ☐ Have extinguishers been hydrostatically tested according to schedules set for the type of extinguisher?

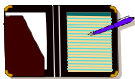
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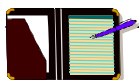
ORDINARY <b>A</b> COMBUSTIBLES							FOR CLASS "A" Types For all Water Base Types
FLAMMABLE <b>B</b> LIQUIDS							FOR CLASS "A, B" Types (1) AFFF (2) Foam
ELECTRICAL <b>C</b> EQUIPMENT							FOR CLASS "B, C" Types (1) Carbon Dioxide (2) Dry Chemical (3) Halon 1211 (4) Halon 1301 (5) Halon 1211, 1301
							FOR CLASS "A,B, C" Types (1) Halon 1211 (2) Halon 1211, 1301 (3) Multipurpose Dry Chemical

20. Other Fire Suppression Systems (If Applicable) (29 CFR 1910.159)

A. Automatic Sprinkler:

- ☐ If automatic sprinklers are provided, is there at least one automatic water supply of adequate pressure, capacity, and reliability?
- ☐ Are water flow alarms provided on all sprinklers?
- ☐ Are the sprinkler systems periodically inspected and properly maintained?
- ☐ Is the minimum clearance between sprinkler deflectors and the top of combustible materials:
  - ☐ 36 inches for solid piles 15 to 21 feet high?
  - ☐ 36 inches for piles 12 to 21 feet high with horizontal channels?
  - ☐ 18 inches for solid piles up to 15 feet high?
  - ☐ 18 inches for piles up to 12 feet high with horizontal channels?

NOTE: This is very general guidance. NFPA standards must be used from specifics.



B. Dry Chemical Systems (29 CFR 1910.161)

- ☐ Does a competent inspector make annual inspections and perform tests on all dry chemical extinguisher system?
- ☐ Are the inspector's reports kept on file?
- ☐ Are visual inspections regularly made?
- ☐ Are all dry chemical systems properly maintained?

21. Fixed Extinguishing Systems, Gaseous Agent (29 CFR 1910.162)

- ☐ Are the HALON and CO2 systems inspected and tested yearly?
- ☐ Are the cylinders weighed or pressure checked twice a year and refilled or replaced if they show a loss of 10% or more?

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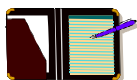
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22. Compressed Air (29 CFR 1910.169)

- ☐ Are pulleys and belts on compressors and motors completely guarded?
- ☐ Are flexible cords or plugs on electric motors periodically checked and replaced if in a deteriorated condition?
- ☐ Do the relief valves operate properly?
- ☐ Are air tanks drained regularly?
- ☐ Is the pressure-relief device and gauge in good operating condition?
- ☐ Is air pressure reduced to less than 30 psi when the nozzle used for cleaning is dead ended?
- ☐ Have employees been instructed that the use of compressed air to blow debris from clothing or body is prohibited because the debris can enter the body and cause serious harm?




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23. Material Handling And Storage (29 CFR 1910.176-.181)

- ☐ Is there safe clearance for equipment through aisles and doors?
- ☐ Is stored material stable and secure?
- ☐ Are storage areas free from tripping hazards?
- ☐ Are storage racks inspected periodically for cracks, weaknesses, or indentations?
- ☐ Are material safety data sheets available in case of exposure to toxic materials?
- ☐ Have personnel been trained in clean-up procedures involving toxic materials?
- ☐ Are only trained operators allowed to operate powered industrial trucks?
- ☐ Is proper personal protective equipment available for use when employees are exposed to toxic materials? Have employees been trained in the use of this equipment?
- ☐ Are appropriate overhead guards installed on powered lift trucks?
- ☐ Is battery charging on electric units performed only in designated areas?
- ☐ Are "NO SMOKING" signs posted near electric battery charging units?
- ☐ Are emergency showers and eye-wash fountains available?
- ☐ On units using internal combustion engines, do the exhaust gases in the room not exceed allowable limits for carbon monoxide?
- ☐ Are dock boards (bridge plates) used when loading or unloading from dock to truck or dock to rail car?





- ☐ Are racks and platforms loaded within the limits of their capacity?
- ☐ Is all storage secured against sliding or collapse?
- ☐ Are all vehicles shut off prior to loading?
- ☐ Are aisle designated and kept clear to allow unhindered passage?
- ☐ If motorized equipment, such as forklift trucks are used, are aisles permanently marked, providing sufficient clearance for passage of the equipment?
- ☐ Are specifications posted for maximum approved loads for floors (except slabs with no basements)?
- ☐ Are fuel gas cylinders and oxygen cylinders separated by 20 feet or a barrier 5 feet high having a 1/2 hour fire resistance rating?
- ☐ Are cylinders secured and stored where they cannot be knocked over?
- ☐ Are cylinder protective caps in place except when they cylinder is in use?
- ☐ Are compressed gas cylinders kept away from sources of heat, elevators, stairs, or gangways?
- ☐ Are all compressed gas cylinders legibly marked for identifying the contents?

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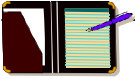
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**24. Machinery And Machine Guarding (29 CFR 1910.212)**

- ☐ Are belts, pulleys, and rotating shafts (air compressor, saws, etc.) properly guarded?
- ☐ Are chains, sprocket, sand gears properly guarded?



- ☐ Are all in-going nip points properly guarded?
- ☐ Are rotating parts (lubrication fittings, etc.) recessed or covered with collars?
- ☐ Are all pieces of equipment with an electric motor or any electrical connection effectively grounded?
- ☐ Are sprockets and V-belt drives that are within reach of platforms and passageways less than seven feet from the floor completely enclosed?
- ☐ Are fans less than 7 feet above the floor protected with a guard having openings 1/2 inch or less?

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25. Abrasive Wheel Machinery (Grinders) (29 CFR 1910.215)

- ☐ Is the work rest used and kept adjusted to within 1/8 inch of the wheel?
- ☐ Is the adjustable tongue on the topside of the grinder used and kept adjusted to within 1/4 inch of the wheel?
- ☐ Do side guards cover the spindle, nut, and flange and 75% of the wheel diameter?
- ☐ Are bench and pedestal grinders permanently mounted?
- ☐ Are glasses with side shields, goggles and face shields always worn as required when grinding?
- ☐ Is a "Ring Test" performed prior to abrasive wheel installation?

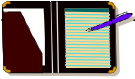
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26. Hand And Portable Power Tools (29 CFR 1910.242, .244)

- ☐ Are tools and equipment (both company and employee-owned) in good condition?
- ☐ Have mushroomed heads on chisels, punches, etc., been reconditioned or replaced if necessary?
- ☐ Have broken hammer handles been replaced?
- ☐ Have worn or bent wrenches been replaced?
- ☐ Have deteriorated air hoses been replaced?
- ☐ Are portable abrasive wheels appropriately guarded?
- ☐ Have employees been made aware of the hazards caused by faulty or improperly used hand tools?

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27. Saws (29 CFR 1910.213)

- ☐ Are there proper guards on all saws?
- ☐ Is the lower portion of the blade on radial arm saws guarded?
- ☐ Are there devices used to automatically return the swing saw or radial saw back to its original position?
- ☐ Are saws used for ripping equipped with anti-kickback devices and spreaders?
- ☐ Does every machine have a master switch to keep it inoperative during repairs or adjustments?
- ☐ Is the exposed part of the saw underneath the table properly guarded?
- ☐ Are blades on bandsaws properly enclosed and guarded?

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28. National Electrical Code Electrical Wiring (29 CFR 1910.309)

- ☐ Have exposed wires, frayed cords, and deteriorated insulation been repaired or replaced?
- ☐ Are junction boxes, outlets, switches, and fittings covered?
- ☐ Does all installed equipment connected by cord and plug have grounded connections?
- ☐ Are electrical appliances, such as vacuums, blowers, and vending machines, grounded?
- ☐ Are all portable electrical hand tools grounded, unless doubly insulated?
- ☐ Are breaker switches identified as to their use?
- ☐ Are flexible cords and cables run only in appropriate places (not through holes in wall or ceiling, or through doorways or windows, or attached to building surfaces)?
- ☐ Are flexible cords and cables free from splices or taps?
- ☐ Are all conduit connections intact?
- ☐ Do all extension cords being used have a ground wire?
- ☐ Do all extension cords being used have appropriate wiring to carry the current being drawn?
- ☐ Are multiple plug adapters not used?
- ☐ In wet locations, is the electrical equipment properly protected?
- ☐ Are flexible cords and cables never substituted for fixed wiring?
- ☐ Are flexible cords and cables fastened so that there is no direct pull on joints or terminal screws?
- ☐ Are tag-outs or lock-outs used when working on equipment?

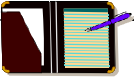
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## 29. Record Keeping

- ☐ Is DOE Health and Safety poster prominently displayed?
- ☐ Are employee complaint forms available?
- ☐ Have occupational injuries or illnesses, except minor injuries requiring only first aid, been recorded?
- ☐ Are DOE and RL mandatory orders 5480.4 and OSHA
- ☐ Standards 29 CFR 1910 available?
- ☐ Have all DOE records been retained for a period of five years, excluding the current year?
- ☐ Has a summary of all occupational injuries and illnesses been compiled at the conclusion of each calendar year and been recorded on OSHA
- ☐ Accident/injury OSHA Form No. 200, and was it posted during the month of February?



### Voluntary Protection Program (VPP)

- ☐ Management Commitment – The first VPP tenet.
- ☐ Employee (Worker) Involvement – The second VPP tenet.
- ☐ Worksite Analysis – The third VPP tenet.
- ☐ Hazard Prevention and Control – The fourth VPP tenet.
- ☐ Safety and Health Training – The fifth VPP tenet.

Information given is based on the DOE VPP. This program is a sign of the new cultural change taking place at Hanford. For more details see the VPP Home Page at

<http://www.hanford.gov/safety/vpp/vppage.htm>



### Your Personal Guidebook

General guidelines will be added as needed to this guide as it is not complete. For details of each requirement, see the Code of Federal Regulations, 29 CFR 1910, Occupational Safety and Health Standards for General Industry.

#### NOTES:

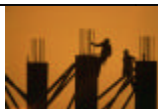
Emergency Phone Numbers: (911) \_\_\_\_\_

Reference Manuals: \_\_\_\_\_

Contacts: \_\_\_\_\_

Walk-Through Scheduled for: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



### Safety Requirements On Construction Sites:

RL employees when visiting construction sites need to set a proper example by checking in before visiting the site, reading and signing the Job Safety Analysis (JSA), and wearing proper personal protective equipment (PPE). PPE may include substantial footwear, safety glasses with side shields, ear plugs, protective clothing, and/or hard hats. The JSA will specify needed PPE. Traditional tennis shoes, canvas top shoes, thin or soft soled athletic shoes, open toed sandals, slippers, dress shoes or other type shoes may not offer sufficient foot protection from general hazards on construction sites. These requirements follow the guidelines in 29 CFR 1926, Occupational Safety and Health Standards for Construction.

Workers are requested to point out safety concerns to those not in compliance with safety requirements. RL employees shall support safety by complying with safety requirements of the construction site, demonstrating good safety practices, and having the proper attitude towards safety.

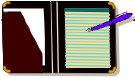
RL employees should be escorted when on the construction site; however, if unescorted, access to the actual work area should be limited to those personnel who are familiar with normal construction hazards and have a legitimate need to be in the work area.

Should an RL employee observe an “imminent danger” safety hazard or act, promptly notify contractor/subcontractor management. Imminent danger is any condition or practice, which could reasonably be expected to cause death or serious physical harm. Follow up by notifying appropriate RL management of the incident and action taken.

Again all visitors, including RL employees, shall check in with appropriate contractor/subcontractor management, and will meet the requirements of the appropriate JSA. Those not in compliance will be refused access until compliance is attained.

“Think Safety.”

The following is a “Construction Project Safety Inspection Checklist” to aid in the evaluation of the work site(s).



### Construction Project Safety Inspection Checklist

Inspector: \_\_\_\_\_

Project #: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

1. General:

- ☐ Has a documented hazardous analysis been performed for the work in progress (JSAs)?
- ☐ Are workers aware of the location and content of MSDS's?
- ☐ Has a Work Site Safety and Health Orientation been conducted?
- ☐ Workers following standard procedures for hazardous material work (i.e., asbestos, lead or radiation)?
- ☐ Proper and adequate lighting provided for the work?
- ☐ Lift trucks maintained and used in a safe condition?
- ☐ Is a first aid kit available with trained employees and adequate contents to handle minor first aid cases when the job is more than five minutes from a first aid station?
- ☐ Exist marked and kept clear?

2. Housekeeping:

- ☐ Drinking water containers provided
- ☐ Used cup receptacles provided
- ☐ Adequate toilet facilities provided
- ☐ Nails bent over or removed from lumber
- ☐ Walkways kept clear of air hoses, electric cords, tools
- ☐ Walkways, corridors, and work areas in general kept clear of trash and debris

3. Personnel Protective Equipment:

- ☐ Hard hats, proper footwear, and proper work clothing worn
- ☐ Eye and face protection used as required
- ☐ Respiratory protection used as required
- ☐ Respirators stored and cleaned properly
- ☐ Is there a fall protection plan available for review?
- ☐ Safety belts or fall protection used where workers could receive serious injury from falls?





4. Signs:

- ☐ Proper warning signs and barricades provided (e.g., Exposed Energized Panels and Equipment)

5. Fire Protection:

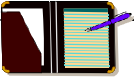
- ☐ Fire extinguishers provided, marked and mounted as required
- ☐ Fire equipment accessible and in proper working order
- ☐ No Smoking signs posted and enforced near flammable and fire extinguishers provided.
- ☐ Temporary plastic structures, enclosures, or covers made of noncombustible materials.
- ☐ Flammable and combustible liquids kept in adequate safety cans.
- ☐ Flammable and combustible liquids stored in proper locations, preferably outside.
- ☐ Flammable and combustible liquids storage areas kept clean and accessible
- ☐ Amounts of flammable and combustible liquids stored kept to a minimum
- ☐ Dispensing containers bonded and grounded
- ☐ Dispensing containers provided with proper nozzles and vents
- ☐ LP gas cylinders stored inside, and capped
- ☐ LP gas cylinders in use properly secured and protected from damage
- ☐ Temporary heaters located away from combustibles or flammables
- ☐ LP gas equipment, hoses, and gauges in safe condition
- ☐ Emergency numbers conspicuously posted

6. Confined Spaces:

- ☐ Confined spaces posted
- ☐ Confined space permits in use
- ☐ The work is in compliance with the confined space permit

7. Radiation Protection:

- ☐ All radiation areas properly and conspicuously posted
- ☐ Valid RWP available covering scope of work currently being performed
- ☐ Radiation monitoring coverage meets RWP requirements and is appropriate for work being performed
- ☐ Radiation Area Entry Log properly maintained
- ☐ Proper protective equipment being used
- ☐ Proper radiation dosimetry devices and procedures utilized



8. Tools:

- ☐ The right tools for the right job
- ☐ Personal protective equipment used as required
- ☐ All guards in place for the tool
- ☐ Electrical tools in safe condition
- ☐ Air tools secured to the hose
- ☐ Grinding tools used properly and in safe working condition
- ☐ OSHA valves installed on air hoses
- ☐ Personnel using powder activated tools properly trained
- ☐ Powder activated tools used properly
- ☐ Abrasive wheels in a safe condition
- ☐ Wheel and tongue guards in place
- ☐ The tools rest within 1/8 inch distance of the wheel

9. Electrical:

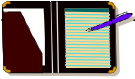
- ☐ All electrical installation in a safe condition
- ☐ GFCIs used on temporary circuits
- ☐ Equipment grounded as required
- ☐ Panels, disconnects or breakers kept clear for access
- ☐ Circuits de-energized or Hot Work Permit in place for the work
- ☐ Lock out/tag outs used
- ☐ HOT circuits protected from worker contact

10. Ladders:

- ☐ Ladders stored properly
- ☐ Stepladders used safely
- ☐ Straight ladders angled properly and tied in or secured
- ☐ Minimum of 36 inch extension above the level of access
- ☐ Job made ladders constructed properly

11. Scaffolds:

- ☐ The proper scaffold for the job
- ☐ Scaffold erected properly and tagged
- ☐ Handrails, mid-rails and toe boards installed
- ☐ Platforms fully planked and secured
- ☐ Screens installed where personnel are required to work or walk below scaffolds
- ☐ Scaffold parts in a safe condition, free from damages
- ☐ Mobile scaffold wheels locked when scaffold is used
- ☐ Proper fall protection used when guard rails are not used



12. Floor and wall openings/Stairways

- ☐ Guard rails placed to guard all floor and wall openings that are 4 feet or more above the next level
- ☐ All floor openings covered and marked
- ☐ Stairs having more than 4 risers provided a handrail
- ☐ Materials stored within 6 feet of floor or wall openings
- ☐ Stairways kept clear of trash and tripping hazards

13. Welding and Cutting

- ☐ Gas cylinders used, stored and handled properly
- ☐ Cylinders secured
- ☐ Combustibles removed or protected during welding/cutting
- ☐ Welding/cutting equipment in a safe condition
- ☐ Hoses, leads or cables kept out of walkways and protected from damage
- ☐ Fire extinguishers accessible
- ☐ Proper ventilation provided

14. Material handling and use:

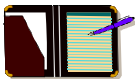
- ☐ Materials in storage kept in safe condition
- ☐ Rigging equipment free from damage and unsafe conditions
- ☐ Wire rope clips applied properly
- ☐ Softeners used when needed
- ☐ Proper rigging used for weights being lifted

15. Cranes and Heavy Equipment:

- ☐ All heavy equipment kept in a safe condition
- ☐ All heavy equipment inspected daily by the operator
- ☐ Wire rope inspected frequently
- ☐ Heavy equipment used in a safe manner
- ☐ Swinging radius of cranes barricaded
- ☐ All of the crane outriggers used and placed on secure areas
- ☐ Safety latches or mousing used on load hooks

16. Excavation:

- ☐ Excavations sloped 1 ½ to 1
- ☐ Excavations safely barricaded
- ☐ Shoring or other means of protection required
- ☐ Safe access and exit provided
- ☐ Underground utilities have been identified, marked and protected



☐ Excavations inspected daily

17. Concrete and Forms

- ☐ Workers using personal protective equipment when working with concrete
- ☐ Vertical protruding rebars guarded to protect employees from impalement
- ☐ Proper support provided for forms
- ☐ Safe working platforms for workers
- ☐ Safe walkways provided for decking, wire mesh and concrete placement

18. Steel Erection:

- ☐ Work performed in a safe manner
- ☐ Guardrails provided on open floors
- ☐ Workers protected from falls

19. Roofing:

- ☐ Fire extinguishers provided at tar pots
- ☐ Workers protected against falls from roofs

Recommendation/Corrective Action Taken:

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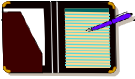
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Inspector's Signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_



### Areas Of Frequent Hazard Recognition

#### SIGNS

- |   |               |
|---|---------------|
| 1. Electrical dangers posted            | 4. Exits      |
| 2. Operating Instructions               | 5. Flammables |
| 3. Personal Protective Equipment Needed | 6. Smoking    |

#### OVERHEAD PROTECTION

- |              |                 |
|--------------|-----------------|
| 1. Entrances | 3. Construction |
| 2. Warnings  | 4. Other        |

#### WALKWAYS, RUNWAYS & RAMPS

- |                 |                   |
|-----------------|-------------------|
| 1. Width        | 5. Slope          |
| 2. Railings     | 6. Rise Limit     |
| 3. Construction | 7. Non-slip Tread |
| 4. Curbs        |                   |

#### HOISTING EQUIPMENT

- |                       |                                   |
|-----------------------|-----------------------------------|
| 1. Guys               | 6. Carcover and Enclosure         |
| 2. Cables and Sheaves | 7. Ladder or Car-Arresting Device |
| 3. Turnbuckles        | 8. Base Barricade                 |
| 4. Signals            | 9. Platform                       |
| 5. Hinge Bars         |                                   |

#### EXCAVATION – TRENCHES

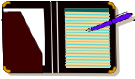
- |                             |                    |
|-----------------------------|--------------------|
| 1. Shoring                  | 5. Caissons        |
| 2. Ladder                   | 6. Tunnels         |
| 3. Excavation Material      | 7. Blasting        |
| 4. Compressed Gas Cylinders | 8. Shoring Drawing |

#### FIRE PREVENTION

- |  |                       |
|--|-----------------------|
| 1. Storage of Gasoline or other Flammables | 5. Tar Kettles        |
| 2. Container Markings                      | 6. Welding Operations |
| 3. Temporary Heaters                       | 7. Fire Extinguishers |
| 4. Compressed Gas Cylinders                | 8. Other              |

#### LADDERS

- |                 |            |
|-----------------|------------|
| 1. Construction | 4. Landing |
| 2. Cleats       | 5. Secure  |
| 3. Treads       |            |



#### SCAFFOLDS

- |                 |   |
|-----------------|---|
| 1. Construction | 6. Safety Lines, Railings, and Flagging |
| 2. Width        | 7. U-Bolts                              |
| 3. Railings     | 8. Cables, Ropes                        |
| 4. Toe Boards   |   |
| 5. Rigging      |   |

#### WALL OPENING – FLOOR OPENING – ROOFING

- |                  |                                    |
|------------------|------------------------------------|
| 1. Railings      | 4. Perimeter Railings and Flagging |
| 2. Covered Tight | 5. Toe Board                       |
| 3. Secured       |                                    |

#### STAIRS AND STAIR LANDINGS

- |                     |                 |
|---------------------|-----------------|
| 1. Railings         | 4. Debris       |
| 2. Temporary Treads | 5. Construction |
| 3. Secure           |                 |

#### HOUSEKEEPING

- |                       |                               |
|-----------------------|-------------------------------|
| 1. Aisles, Walkways   | 4. Material, Tools, Equipment |
| 2. Nails              | 5. Containers                 |
| 3. Removal Procedures |                               |

#### LIGHTING AND TEMPORARY WIRING

- |                   |                           |
|-------------------|---------------------------|
| 1. Lighting       | 4. Overcurrent Protection |
| 2. Wire Height    | 5. Other                  |
| 3. Wire Condition |                           |

#### POWER AND PORTABLE SAWS

- |                       |                        |
|-----------------------|------------------------|
| 1. Guards             | 3. Kickback Protection |
| 2. Under-table Guards | 4. Splitter            |

#### GROUNDING ELECTRICAL EQUIPMENT

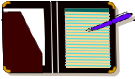
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|-----------------------|---------------------------|
| 1. Not Grounded       | 3. Ground Fault Interrupt |
| 2. Ineffective Ground |                           |

#### HAND TOOLS

- |                     |                             |
|---------------------|-----------------------------|
| 1. Conditions       | 3. Explosive-Actuated Tools |
| 2. Projectile Tools |                             |

#### PERSONAL PROTECTIVE EQUIPMENT

- |              |                       |
|--------------|-----------------------|
| 1. Hard Hats | 4. Respirators        |
| 2. Goggles   | 5. Hearing Protection |
| 3. Gloves    | 6. Other              |



**FIRST AID**

- |                 |                      |
|-----------------|----------------------|
| 1. Contents     | 3. Trained Employees |
| 2. Availability |                      |

**SECURITY**

- |              |                           |
|--------------|---------------------------|
| 1. Fencing   | 4. Unauthorized Personnel |
| 2. Vandalism | 5. Target Equipment       |
| 3. Lighting  |                           |

**TRAFFIC CONTROL**

- |                  |               |
|------------------|---------------|
| 1. Parking       | 3. Barricades |
| 2. Speed Control | 4. Haul Ropes |

**HEAVY EQUIPMENT**

- |                  |                       |
|------------------|-----------------------|
| 1. Guards        | 4. Rough/Slope Ground |
| 2. Warning Belts | 5. Cab Protection     |
| 3. Fueling       |                       |

**MATERIAL HANDLING**

- |                  |                  |
|------------------|------------------|
| 1. Size          | 4. Techniques    |
| 2. Slippery, Wet | 5. Team Lifting  |
| 3. Sharp Edges   | 6. Weight Limits |



### OSHA/DOE Safety and Health Checklist for Facility Representatives:

Subject: \_\_\_\_\_

Facility: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

This checklist is intended to be used as a guide by Facility Representatives. Facility Representatives are encouraged to amend this checklist where specific OSHA/DOE safety and health requirements are found applicable for a specific site. **AS APPLICABLE, ANY ITEM FOUND DEFICIENT CAN BE REFERRED TO THE QUALITY, SAFETY AND HEALTH DIVISION FOR FURTHER REVIEW, EVALUATION AND CONFIRMATION.**

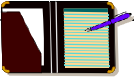
1. General:

- ☐ Employees receive work related safety and health training during work hours.
- ☐ Work related safety and health training is conducted for new and transferred employees.
- ☐ Training dates for employees are documented.
- ☐ Training certification from sources other than the employer is on file with the employer, i.e., crane operation, fork lift driver, electrician.
- ☐ Training is supplemented when there is new information or procedures.

2. Bloodborne Disease:

- ☐ Employers shall provide a training program for all employees have an occupational exposure.
- ☐ Training shall be provided at least annually.
- ☐ Additional training is provided if new changes occur before annual training is given.





3. Confined Space:

- ☐ Employers provide training to all employees who work in confined spaces.
- ☐ Training includes the knowledge and skills to perform the job safely.
- ☐ Each employee is training to recognize a confined space as defined by OSHA.
- ☐ Employees are provided with training prior to entering a confined space.
- ☐ Training is certified in writing with the inclusion of:
  - ☐ The employee's name
  - ☐ Trainer's signature or initials
  - ☐ Dates of training

4. Cranes:

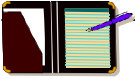
- ☐ Crane operators have been trained in the tasks they are asked to perform.

5. Electrical Safety:

- ☐ Any electrical installations are done by professionally trained electricians.
- ☐ Employees who are in areas where there is a danger of possible electric shock have been trained to avoid accident or injury.
- ☐ Employees working on electrical machines are trained in Hanford lockout/tag out procedures.

6. Emergency Evacuation Plans:

- ☐ Employees are trained in the proper emergency and evacuation plans for the areas in which they work. Areas of importance include:
  - ☐ How and where to report emergencies
  - ☐ Proper procedures for evacuation and the routes to take.
  - ☐ Recognition of the various emergency alarms
  - ☐ Communications during emergencies
  - ☐ Responsibilities asked of employees
  - ☐ Location of fire fighting equipment and how to use it
  - ☐ Training is provided at least annually



7. Entrances and Exits:

- ☐ Employees are trained to identify exits and understand the quickest routes for escape in an emergency.
- ☐ Fire drills are conducted periodically.

8. Fire Protection:

- ☐ Where fire extinguishers are provided for employee use, training is provided.
- ☐ Training is provided on alarm responses and evacuation procedures.
- ☐ Interior structural fire fighters are provided education sessions and/or training at least quarterly.

9. Flammable and Combustible Liquids:

(Where employees are tasked with fire fighting responsibilities)

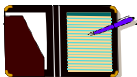
- ☐ Employees are trained in the extinguishing methods for the various types of flammable or combustible liquids in the area.
- ☐ Employees know what type of fire extinguisher to use for different classes of fire.
- ☐ Employees are trained to know the toxic hazards the liquids may pose when burning.

10. Fork Trucks:

- ☐ Only authorized operators are allowed to operate fork trucks.
- ☐ Training is documented and on file supporting the authorization of fork truck operators.

11. Hand and Portable Power Tools:

- ☐ Employees are trained on the proper use of hand and portable power tools and the hazards that may arise from their use.
- ☐ Employees are trained in the proper use of personal protective equipment appropriate to the tools being used.



12. Hazardous Waste Operations and Emergency Response (HAZWOPER):

- ☐ Personnel on a hazardous waste site are properly trained in hazardous waste operations prior to participating in any activity on the site.
- ☐ Items that shall be addressed include:
  - ☐ Names of persons responsible for site safety and health
  - ☐ Safety and health hazards present at the site.
  - ☐ Safe working practices
  - ☐ Use of personal protective equipment
  - ☐ Medical surveillance requirements

Initial Training Requirements:

- ☐ General site workers and laborers engaged in hazardous waste removal or other activities which expose workers to hazardous substances have a minimum of 40 hours off-site instruction and three days of actual field experience under the direct supervision of a trained and experienced field supervisor.
- ☐ Occasional workers, on site for a limited task, such as land surveyors, who are unlikely to be exposed, receive at least 24 hours of off-site instruction and one day of actual field experience under the direct supervision of a trained and experienced supervisor.
- ☐ Occasional workers required to wear respirators have received an additional
- ☐ 16 hours of off-site training and two days actual field experience under the direct supervision of a trained and experienced supervisor.

Management and Supervisor Training:

- ☐ Managers and supervisors of general site workers have attended at least 40 hours of off-site training and three days of supervised field experience.
- ☐ Managers and supervisors of occasional workers not required to wear respirators and/or are unlikely to be exposed over permissible exposure limits, receive 24 hours of off-site training and eight hours of specialized training such as:



- ☐ Personal protective equipment program
- ☐ Employee training program
- ☐ Spill containment
- ☐ Monitoring techniques

#### Employee and Trainer Certification

- ☐ Trainers have completed a trainer's course or have academic credentials for the subject being taught.
- ☐ Each employee attending training has received a written certificate. The employer keeps a record of training.
- ☐ All general on-site employees, managers, and supervisors are to receive an 8-hour refresher course annually.

#### 13. Ladders:

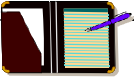
- ☐ Each employee who uses a ladder in the work place understands:
  - ☐ How to set up a ladder
  - ☐ Procedures for tying down a ladder
  - ☐ How to properly climb a ladder
  - ☐ Ladder storage

#### 14. Lockout/Tagout:

- ☐ Employees who may have to shut down a machine for breakdown maintenance or similar situations have received de-energizing and re-energizing training in accordance with the Hanford Lock and Tag Procedure.

#### 15. Management of Hazardous Material:

- ☐ Employees, upon first entering the work place, are trained to identify the hazards with each chemical process they work.
- ☐ Training shall include:
  - ☐ Emergency procedures
  - ☐ Shut down procedures
  - ☐ Incident reporting
- ☐ Refresher training is required every 3 years.



16. Material Handling:

- ☐ Employees have been trained in the proper handling procedures for materials they use or handle.
- ☐ Training includes, but is not limited to:
  - ☐ Housekeeping
  - ☐ Lifting
  - ☐ Storage (especially for flammable or combustible liquids)
  - ☐ Labeling of all materials

17. Medical Services and First Aid:

- ☐ Employer has ensured that each work shift of each section at the work site has an employee trained in the administration of first aid.
- ☐ Employee trained in first aid, at a minimum, knows how to care for any minor injury and knows who to contact for further aid.
- ☐ Where medical services are provided, specifically trained persons, such as licensed physicians, are available.

18. Noise Protection:

- ☐ Employer has provided basic training on the use of hearing protection and its importance on the job.

19. Personal Protective Equipment:

- ☐ Employees are trained in the proper selection, use, inspection and maintenance of personal protective equipment required in their work. Exception: Respirators are selected by the Respirator Program Administrator.
- ☐ Employees are trained on emergency procedures should there be a failure of personal protective equipment, e.g., failure of respiratory equipment.

20. Radiation:

- ☐ See Rad Con Manual for training requirements.

21. Right-to-Know/MSDS (Material Safety Data Sheet):



- ☐ Employees understand they have the right to any information concerning:
  - ☐ Chemicals used in the work place
  - ☐ Tests or analysis
  - ☐ Effects chemicals or environment may have on their health
  - ☐ MSDS
- ☐ Employees are trained specifically on:
  - ☐ The written Right-To-Know Program
  - ☐ Labeling of chemicals
  - ☐ How to understand an MSDS
  - ☐ Location of MSDS's

22. Scaffolding:

- ☐ Employees using scaffolds know how to properly climb the scaffold and when to "tie off" to the scaffold or use an independent "tie off."

23. Welding:

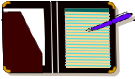
- ☐ Only certified persons are allowed to perform welding operations.

24. Training Records:

- ☐ Where training records are kept, items include:
  - ☐ Names of employees trained
  - ☐ Training material
  - ☐ Certification record of employee
  - ☐ Trainer's name
  - ☐ Trainer's certification
  - ☐ Dates of training

Facility Representative Signature: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_



### References:

- ❖ References made in the "Checklist" subtitles refer to appropriate sections of the "General Industry," OSHA, 29 Code of Federal Regulations (CFR), 1910 Standard (Occupational Safety and Health Standards).



### Related Chapters:

- ❖ Chapter 1, "Organization and Program for Operational Safety; General."
- ❖ Chapter 2, "Codes and Standards."
- ❖ Chapter 3, "OSHA"
- ❖ Chapter 5, "Construction and Demolition."
- ❖ Chapter 15, "Industrial Hygiene; General"
- ❖ Chapter 16, "Industrial Hygiene; Factors."